Serial No. 10/662,809 Docket No. T36-159069M/RS

AMENDMENTS TO THE CLAIMS:

Please amend the claims as follows:

1. (Currently Amended) A method of producing a Group III nitride compound semiconductor substrate, comprising:

the first layer forming step of forming a first Group III nitride compound semiconductor layer by a halide vapor-phase epitaxy method (i) directly on a silicon (Si) substrate or (ii) after forming a buffer layer on said silicon substrate; and

the silicon substrate removing step of removing almost substantially the a whole of said silicon substrate from a rear surface by etching a rear surface of said silicon substrate after the a completion of the first layer forming step said forming a first Group III nitride compound semiconductor or during said forming a first Group III nitride compound semiconductor the first layer forming step.

2. (Currently Amended) A method of producing a Group III nitride compound semiconductor substrate according to claim 1, further comprising:

the second layer forming step of forming a second Group III nitride compound semiconductor layer by a halide vapor-phase epitaxy method after said removing substantially the whole of said silicon substrate the silicon substrate removing step.

3. (Currently Amended) A method of producing a Group III nitride compound semiconductor substrate according to claim 2, further comprising:

the first layer removing step of removing a large part of said first Group III nitride compound semiconductor layer from said rear surface by etching after the a completion of the second layer forming step said forming a second Group III nitride compound semiconductor

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<u>layer</u> or during the second layer forming step said forming a second Group III nitride compound semiconductor layer.

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4. (Currently Amended) A method of producing a Group III nitride compound semiconductor substrate according to claim 3, further comprising:

the etching stopper layer forming step of forming, as an etching stopper layer, a

Group III nitride compound semiconductor layer containing comprising a larger amount of aluminum than an amount of aluminum contained comprised in each of the first Group III nitride compound semiconductor layer and the second Group III nitride compound semiconductor layer before said forming a second Group III nitride compound semiconductor layer the second layer forming step, wherein the first layer removing step said removing almost the whole of said silicon substrate is provided for comprises completely removing the first Group III nitride compound semiconductor layer.

- 5. (Currently Amended) A method of producing a Group III nitride compound semiconductor substrate according to claim 2, wherein the first layer forming step said forming a first Group III nitride compound semiconductor layer is carried out at a temperature of not higher than 1000°C whereas the second layer forming step said forming a second Group III nitride compound semiconductor layer is carried out at a temperature of not lower than 1000°C.
- 6. (Currently Amended) A method of producing a Group III nitride compound semiconductor substrate according to claim 1, wherein a film thickness of said first Group III nitride compound semiconductor layer formed in the first layer forming step is not larger than 200 μm.

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7. (Currently Amended) A method of producing a Group III nitride compound semiconductor substrate according to claim 1, wherein said buffer layer is formed as comprises a Group III nitride compound semiconductor layer containing comprising at least one of aluminum or and as a multi-layer including comprising at least one Group III nitride compound semiconductor layer containing comprising aluminum.

8. (Currently Amended) A method of producing a Group III nitride compound semiconductor substrate, comprising:

the first layer forming step of forming a first Group III nitride compound semiconductor layer by a halide vapor-phase epitaxy method (i) directly on a silicon (Si) substrate or (ii) after forming a buffer layer on said silicon substrate; and

the silicon substrate removing step of removing almost substantially the a whole of said silicon substrate from a rear surface by etching a rear surface of said silicon substrate after the a completion of the first layer forming step said forming a first Group III nitride compound semiconductor layer or during said forming a first Group III nitride compound semiconductor layer the first layer forming step;

wherein the first layer forming step said forming a first Group III nitride compound semiconductor layer is carried out at a temperature of not higher than 1000°C whereas the second forming step is carried out at a temperature of not lower than 1000°C.

9. (New) A method of producing a Group III nitride compound semiconductor substrate, comprising:

forming a first Group III nitride compound semiconductor layer by a halide vaporphase epitaxy method on a silicon (Si) substrate; and Serial No. 10/662,809

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removing substantially a whole of said silicon substrate by etching a rear surface of said silicon substrate.

- 10. (New) A method of producing a Group III nitride compound semiconductor substrate according to claim 9, wherein said first Group III nitride compound semiconductor layer is formed directly on said silicon substrate.
- 11. (New) A method of producing a Group III nitride compound semiconductor substrate according to claim 9, wherein said first Group III nitride compound semiconductor layer is formed on said silicon substrate after forming a buffer layer on said silicon substrate.
- 12. (New) A method of producing a Group III nitride compound semiconductor substrate according to claim 9, wherein said silicon substrate is removed after forming said first Group III nitride compound semiconductor layer.
- 13. (New) A method of producing a Group III nitride compound semiconductor substrate according to claim 9, wherein said silicon substrate is removed during forming said first.

 Group III nitride compound semiconductor layer.
- 14. (New) A method of producing a Group III nitride compound semiconductor substrate according to claim 1, wherein a film thickness of said first Group III nitride compound semiconductor layer is not smaller than $10~\mu m$.

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15. (New) A method of producing a Group III nitride compound semiconductor substrate according to claim 1, wherein the Group III nitride compound semiconductor substrate is

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substantially free from warp.

16. (New) A method of producing a Group III nitride compound semiconductor substrate

according to claim 8, further comprising:

forming a second Group III nitride compound semiconductor layer at a temperature of

not lower than 1000°C.

17. (New) A method or producing a Group III nitride compound semiconductor substrate

according to claim 1, wherein the rear surface of said silicon substrate opposes the surface on

which said Group III nitride compound semiconductor layer is formed.

18. (New) A method or producing a Group III nitride compound semiconductor substrate

according to claim 8, wherein the rear surface of said silicon substrate opposes the surface on

which said Group III nitride compound semiconductor layer is formed.